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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/680,791	10/06/2000	Sanjay Khanna	RSW9-2000-0050-US1	2904

7590 10/06/2004  
Jerry W. Herndon  
IBM Corporation T81/503  
P.O. Box 12195  
Research Triangle Park, NC 27709

EXAMINER
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EL CHANTI, HUSSEIN A

ART UNIT	PAPER NUMBER
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2157

DATE MAILED: 10/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/680,791

Applicant(s)

KHANNA, SANJAY

Examiner

Hussein A El-chanti

Art Unit

2157

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 July 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 19 and 26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-18 and 20-25 is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. This action is responsive to amendment received on July 3, 2004. Claims 1, 7, 13 and 19 were amended. Claims 20-26 were newly added. Claims 1-26 are pending examination.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 19 and 26 are rejected under 35 U.S.C. 102(e) as being anticipated by Moles et al., U.S. Patent No. 6,466,779 (referred to hereafter as Moles).

As to claim 19, Moles teaches a method for providing fast and efficient address lookup for an address comprised of a plurality of address components, the method comprising the steps of

creating a plurality of arrays comprising an array for each of the address components, wherein each array comprises a plurality of entries which are indexed using values of the address component for which the array was created (see col. 4 lines 9-14 and col. 9 lines 49-64);

storing entries and information for each address to be subsequently looked up, further comprising the steps of

creating an entry for a particular address using the plurality of arrays (see col. 4 lines 9-14 and col. 9 lines 49-64); and

storing information associated with the particular address value in a storage or memory location associated with a last significant component of the entry, wherein the last significant component is determined by a bit mask associated with the particular address (see col. 4 lines 17-26 and lines 57-col. 5 lines 5); and

retrieving the stored information associated with a selected address value from the plurality of arrays (see col. 4 lines 17-26 and lines 57-col. 5 lines 5).

As to claim 26, Moles teaches the method of claim 19 further comprising the step of subsequently looking up a selected address value by retrieving the stored information associated with the selected address value from the plurality of arrays (see col. 4 lines 17-26 and lines 57-col. 5 lines 5).

3. Applicant's arguments filed have been fully considered but they are not persuasive.

In the remarks, the applicant argues in substance that; A) Moles does not teach a bit mask.

In response to A) Moles teaches a method of looking up an address by checking a provisioned bit (see col. 10 lines 1-15) and therefore Moles meets the scope of the claimed limitation "bit mask associated with the particular address".

4. Claims 1-18 and 20-25 are allowed.

5. The following is an examiner's statement of reasons for allowance:

The prior art of record fails to teach neither singly or in combination the claimed limitation of "computer-readable program code means for repeating the indexing and setting using the next highest order of the arrays and the next most significant component of the particular address while the bit mask indicates that the next-sequential neighboring address component is considered significant and for (1) storing information associated with the particular address value in a storage or a memory location and (2) setting a pointer field associated with the index element to point to the storage or memory location otherwise and computer-readable program code means for returning the stored information from the storage or memory location pointed to by the pointer field when the flag is set off or for repeating the indexing and determining for the next highest order of the arrays and the next most significant component of the selected address value when the flag is set on" as in claims 1-18 and 20-25.

**6. THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

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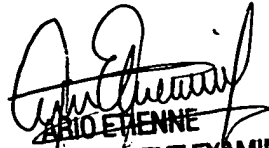
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hussein A El-chanti whose telephone number is (703)305-4652. The examiner can normally be reached on Mon-Fri 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (703)308-7562. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hussein El-chanti

Sep. 30, 2004

  
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SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100